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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,309	03/24/2004	Tatsuya Miyairi	04329.3291	3825

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EXAMINER

PHAM, THOMAS K

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/807,309

Applicant(s)

MIYAIRI, TATSUYA

Examiner

Thomas K. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-10 is/are rejected.
- 7) ☒ Claim(s) 6, 7 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17:2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

First Action on the Merits

1. Claims 1-11 of U.S. Application 10/807,309 filed on 03/24/2004 are presented for examination.

Quotations of U.S. Code Title 35

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim Rejections - 35 USC § 103

6. Claims 1-5 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,348,873 ("Wang") in view of U.S. Patent Application Publication No. 2003/0063437 ("Kurihara").

Regarding claim 1

Wang teaches an information processing apparatus comprising:

- a CPU (see Col. 1 lines 32-53);
- a fan which cools the CPU (see Col. 1 line 63-66);
- means for accepting an input operation by a user (see Col. 2 lines 10-13);
- means for determining a speed of the fan according to the input operation accepted by the means for accepting the input operation (see Col. 2 lines 15-20 and 30-41); and
- means for controlling the speed of the fan on the basis of a determined speed (see Col. 2 lines 45-47).

Wang does not specifically teach means for determining a number of revolutions of the fan based on an input; and means for controlling the number of revolutions of the fan based on the determination.

However, Kurihara teaches determining a number of revolutions of the fan based on an input (see paragraphs 54, 57 and according to FIG. 4, each speed setting is at different revolutions); and controlling the number of revolutions of the fan on the basis of the determination (see paragraph 76) for the purpose of preventing a chip temperature from exceeding a temperature and avoiding unnecessary noises caused by a fan that always run at a fixed resolution speed (see paragraph 22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the fan revolution speed setting of Kurihara with the cooling system of Wang because it would provide for the purpose of preventing a chip temperature from exceeding a temperature and avoiding unnecessary noises caused by a fan that always run at a fixed resolution speed.

Regarding claim 8

Wang teaches a fan control method for monitoring the temperature of a CPU and controlling the number of revolutions of a fan which cools the CPU, the method comprising:

- accepting an input operation by a user (see Col. 2 lines 10-13);
- setting a speed of the fan according to the accepted input operation (see Col. 2 lines 15-20 and 30-41); and
- controlling the speed of the fan on the basis of the determined speed (see Col. 2 lines 45-47).

Wang does not specifically teach setting a maximum number of revolutions of the fan according to an input; and means for controlling the number of revolutions of the fan based on the determination.

However, Kurihara teaches setting a maximum number of revolutions of the fan according to an input (see paragraph 81 and according to FIG. 4, each speed setting is at different revolutions); and controlling the number of revolutions of the fan on the basis of the determination (see paragraph 76) for the purpose of preventing a chip temperature from exceeding a temperature and avoiding unnecessary noises caused by a fan that always run at a fixed resolution speed (see paragraph 22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the fan revolution speed setting of Kurihara with the cooling system of Wang because it would provide for the purpose of preventing a chip temperature from exceeding a temperature and avoiding unnecessary noises caused by a fan that always run at a fixed resolution speed.

Regarding claim 2

Kurihara teaches the means for controlling the number of revolutions comprises means for monitoring a temperature of the CPU, and controlling an operating speed of the CPU such that the temperature is controlled within an permissible temperature (see paragraph 33).

Regarding claim 3

Wang teaches the means for accepting the input operation accepts the input operation by a predetermined function key operation or a switch operation of the user (see Col. 2 lines 29-13), and Kurihara teaches the means for controlling the number of revolutions comprises means for increasing or decreasing a maximum number of revolutions of the fan step by step according to a number of times of key or switch operation accepted by the means for accepting the input operation (see paragraph 76).

Regarding claim 4

Kurihara teaches the means for monitoring the temperature compares the number of revolutions of the fan and the maximum number of revolutions determined according to the input operation accepted by the means for accepting the input operation (see paragraph 77), and lowers the operating speed of the CPU and decreases the number of revolutions of the fan when the number of revolutions of the fan has reached the maximum number of revolutions (see paragraph 78).

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Regarding claim 5

Wang teaches the means for controlling the number of revolutions comprises user interface means for presenting to the user the maximum number of revolutions of the fan determined by the operation input of the user (see Col. 2 lines 51-62).

Regarding claim 9

Kurihara teaches the setting the maximum number of revolutions of the fan includes increasing or decreasing the maximum number of revolution of the fan step by step according to the number of times of input operation by a predetermined function key operation or switch operation by the user (see paragraph 76).

Regarding claim 10

Kurihara teaches the controlling the number of revolutions of the fan includes comparing the number of revolutions of the fan and the maximum number of revolutions determined according to the accepted input operation (see paragraph 77); and lowering the operating speed of the CPU and decreasing the number of revolutions of the fan when the number of revolutions of the fan is determined to have reached the maximum number of revolutions (see paragraph 78).

Allowable Subject Matter

7. Claims 6, 7 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (571) 272-3689, Monday - Thursday from 6:30 AM - 5:00 PM EST or contact Supervisor *Mr. Anthony Knight* at (571) 272-3687.

Any response to this office action should be mailed to: **Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450**. Responses may also be faxed to the **official fax number (571) 273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas Pham
Patent Examiner



March 20, 2006